

***Caledoniscincus austrocaledonicus* (Reptilia: Scincidae) from Ile Surprise, D'Entrecasteaux Reefs, New Caledonia¹**

AARON M. BAUER,² ALAIN RENEVIER,³ AND ROSS A. SADLIER⁴

ABSTRACT: The common, endemic New Caledonian skink *Caledoniscincus austrocaledonicus* is reported for the first time from the far north of the territory, specifically from Ile Surprise in the D'Entrecasteaux Reefs. The herpetofauna of Ile Surprise is characteristic of littoral habitats in mainland New Caledonia. The overwater transport of *C. austrocaledonicus*, like that of *C. atropunctatus*, which occurs in Vanuatu as well as New Caledonia, has probably been relatively recent.

Caledoniscincus austrocaledonicus is the most common and widespread lizard in New Caledonia (Sadlier 1986, Bauer and Vindum 1990). It occurs throughout the main island of New Caledonia and on all three of the major islands of the Loyalty group (Figure 1), occupying most nonforested habitats (Roux 1913, Sadlier 1986, Bauer and Vindum 1990). Sadlier (1986) recorded 18 mainland New Caledonian localities for the species, as well as two southern offshore records. Bauer and Vindum (1990) listed 26 mainland localities as well as the Ilot de Hiéngène (20° 40' S, 164° 44' E). The northernmost locality to date has been Pointe Narian (20° 05' S, 164° 00' E) at the northern tip of the New Caledonian mainland. We here report on the first recorded occurrence of *C. austrocaledonicus* from the northern islands of New Caledonia and discuss some aspects of distribution in the genus as a whole.

Ile Surprise is the southernmost of the emergent islands of the D'Entrecasteaux Reefs (Figure 1). It lies ca. 215 km north of the tip of the mainland of New Caledonia at latitude 18° 29' S, longitude 163° 05' E. Surprise varies in elevation from 3 to 15 m

and covers an area of ca. 0.30 km². Nine specimens referable to *Caledoniscincus austrocaledonicus* were collected by Alain Renevier on Ile Surprise on 31 December 1987. These have been deposited in the collections of the Australian Museum, Sydney (AMS R135040-4) and the California Academy of Sciences, San Francisco (CAS 175541-4). Lizards were collected as part of a general natural history reconnaissance of the D'Entrecasteaux Reefs. Although the flora, avifauna, and insects of the island were most thoroughly researched (Cherrier 1988), observations on reptiles were also made.

The natural history of the D'Entrecasteaux Reefs is poorly known (Fourcassie 1967, Cherrier 1988, Anonymous 1989). Jouan (1864) seems to be the only author before the recent surveys to have discussed the terrestrial reptiles of New Caledonia's northern islands. He mentioned the presence of a large gecko, probably *Rhacodactylus leachianus*, in the Iles Belep, although no specimens have since been collected there. The expected herpetofauna of the D'Entrecasteaux Group is small. In addition to the one species of terrestrial reptile collected, three species of marine turtles, *Chelonia mydas*, *Eretmochelys imbricata*, and *Caretta caretta*, were observed ovipositing on Ile Surprise (Cherrier 1988). A subsequent expedition to the island, surveying sea birds and turtles (Anonymous 1989), also sighted skinks, probably *C. austrocaledonicus*, as well as a gecko that was found to live "sous les pierres ou sous les souches d'arbres en décom-

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² Biology Department, Villanova University, Villanova, Pennsylvania 19085.

³ 9, rue du Cdt. de Mersuay, Magenta, Nouméa, Nouvelle-Calédonie.

⁴ Department of Herpetology, Australian Museum, 6-8 College St., Sydney, New South Wales 2000, Australia.

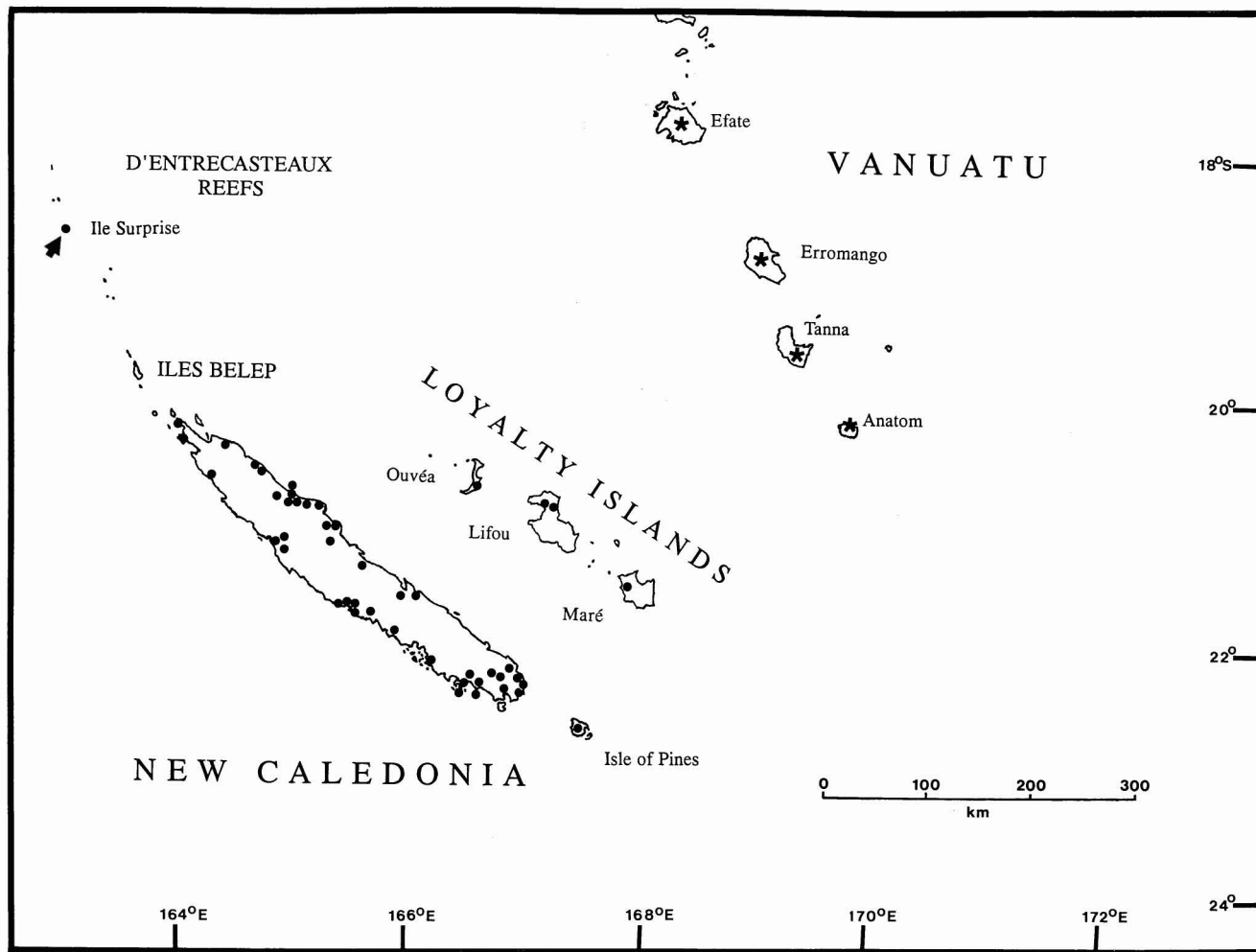


FIGURE 1. Map of the New Caledonian region showing the distribution of *Caledoniscincus austrocaledonicus* (closed circles) and the location of Ile Surprise (arrow). The Vanuatuan localities for *Caledoniscincus atropunctatus* are indicated by stars.

position." Although the microhabitat described would be appropriate for several species, the general low, open topography of the Ile Surprise suggests that the species involved was *Nactus pelagicus*. To the observed skink and gecko one might only add *Cryptoblepharus novocaledonicus* as a likely inhabitant. All of these species are common in littoral habitats in mainland New Caledonia.

The genus *Caledoniscincus* is a regional endemic, with three species, *C. austrocaledonicus*, *C. orestes*, and *C. festivum*, occurring only in the Territory of New Caledonia. The latter two taxa are found exclusively on the mainland. A fourth species, *C. atropunctatus*, has also been recorded from neighboring Vanuatu. Burt and Burt (1932) reported on material from Efate. Although additional Efate specimens have not since been collected, Medway and Marshall (1975) collected material on Erromango, Tanna, and Anatom (island names follow Motteler 1986). The method of transport of the Vanuatuan *Caledoniscincus* is not known, but the presence of specimens before World War II (before extensive interisland human movements) and their occurrence on several islands, in forested habitats only (Medway and Marshall 1975), suggest that human introduction is unlikely. Bauer (1988) proposed that the occurrence of *C. atropunctatus* in Vanuatu was the relatively recent result of the changing geographical position of parts of the Vanuatu arc. The fact that this species has not been recorded on all of the Loyalty Islands (specimens are known only from Lifou) suggests that it is not an exceptionally good colonizer, and the possibility exists that dispersal to Vanuatu preceded the emergence of the Loyalty Islands. The presence of *C. austrocaledonicus* on Ile Surprise must also be the result of fairly recent movements, since the D'Entrecasteaux Reefs have not long been emergent. *C. austrocaledonicus* is frequently found in marginal habitats, including among beach wrack (Sadlier 1986, Bauer and DeVaney 1987, Bauer and Vindum 1990), and non-human-mediated transport is certainly possible. The distance traversed is probably less than the 215 km to the mainland, as the Iles Belep almost certainly support this species as

well. Nonetheless, Ile Surprise is the most frequently visited of the islands in the D'Entrecasteaux group (Anonymous 1989) and the possibility of accidental human introduction exists.

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